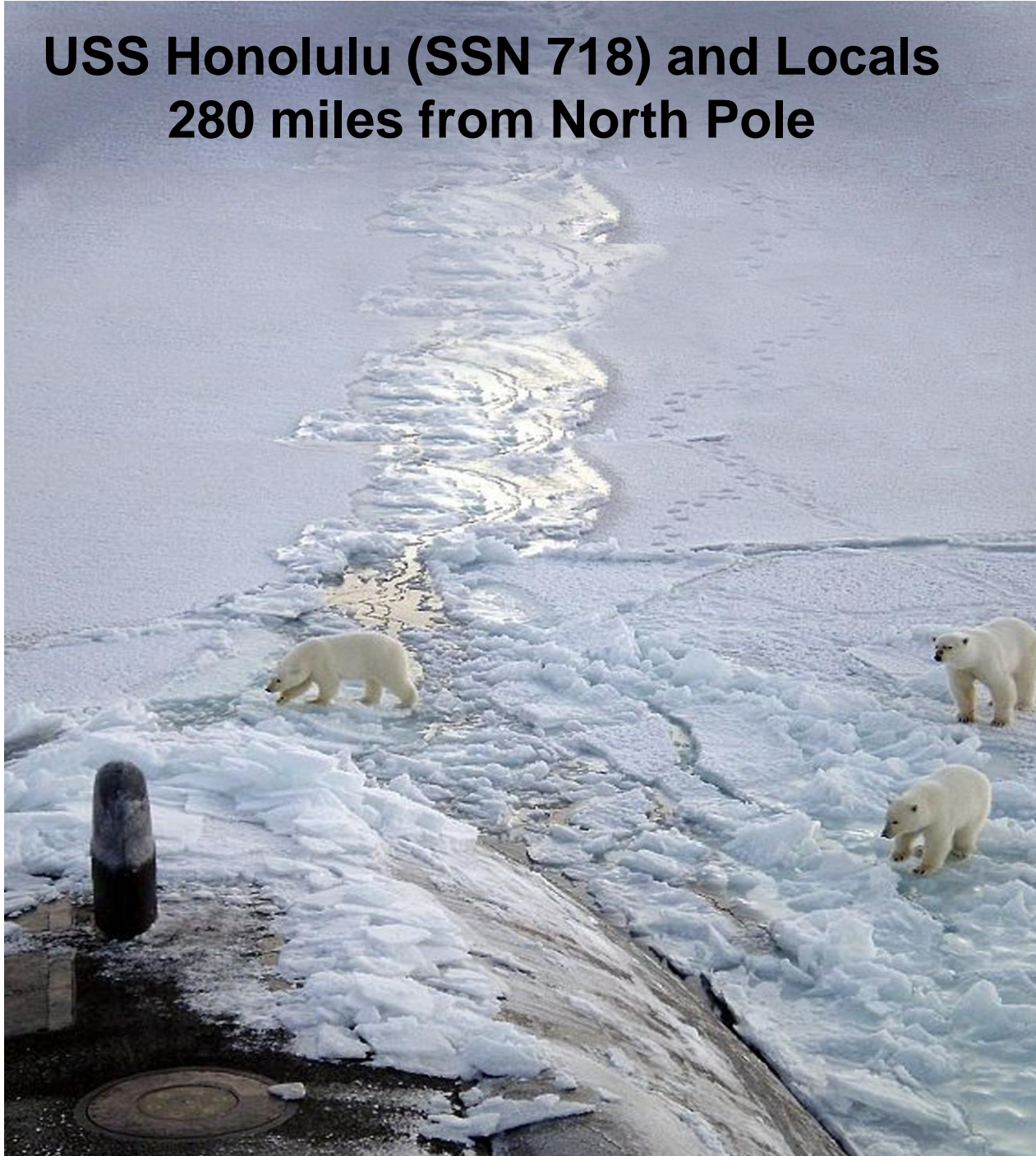
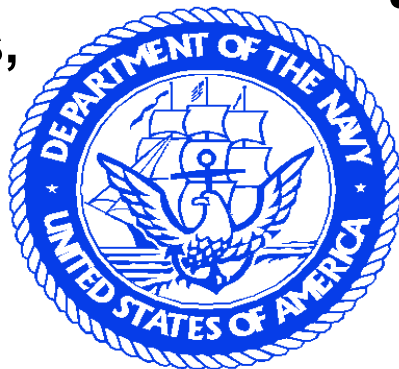


USS Honolulu (SSN 718) and Locals 280 miles from North Pole



BROAD RESPONSIBILITIES

- Research, Development, Design
- Acquisition, Specification, Construction, Testing
- Operation, Training, Maintenance
- Overhaul, Refueling, Disposal
- Reactor Safety, Radiological Controls, Environmental Safety, Occupational Health
- Security, Nuclear Safeguards, Transportation
- Administration
(Public Information)

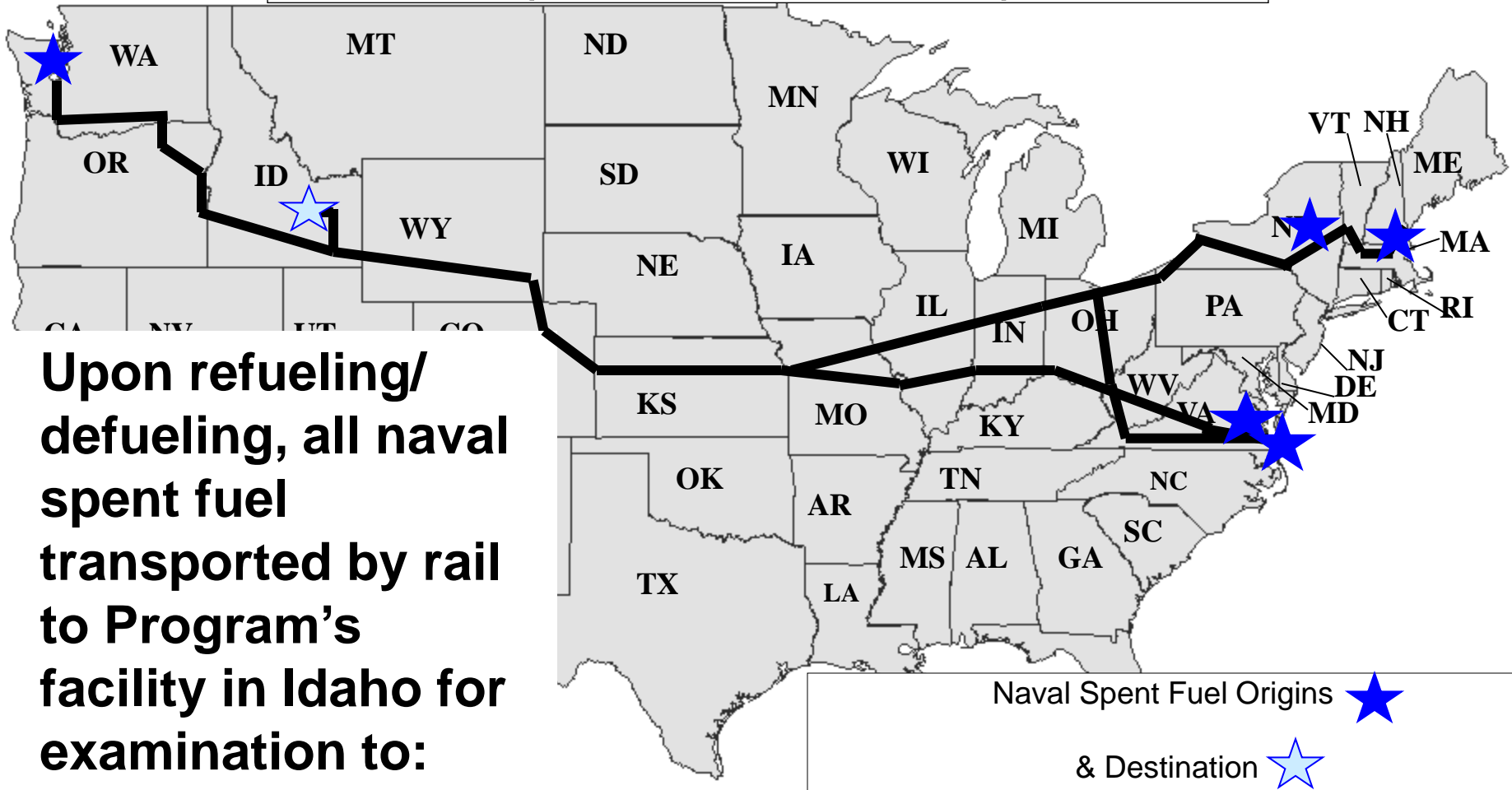


PROGRAM RECORD

- Program founded in 1948
- 5,800 reactor-years of safe operations
- 136,000,000 miles safely steamed
- 103 operating naval reactors
- Welcomed in over 150 ports worldwide and 50 countries

TYPICAL NAVAL SPENT FUEL SHIPPING ROUTES

776 CONTAINERS SAFELY SHIPPED (March 1957 to Present)



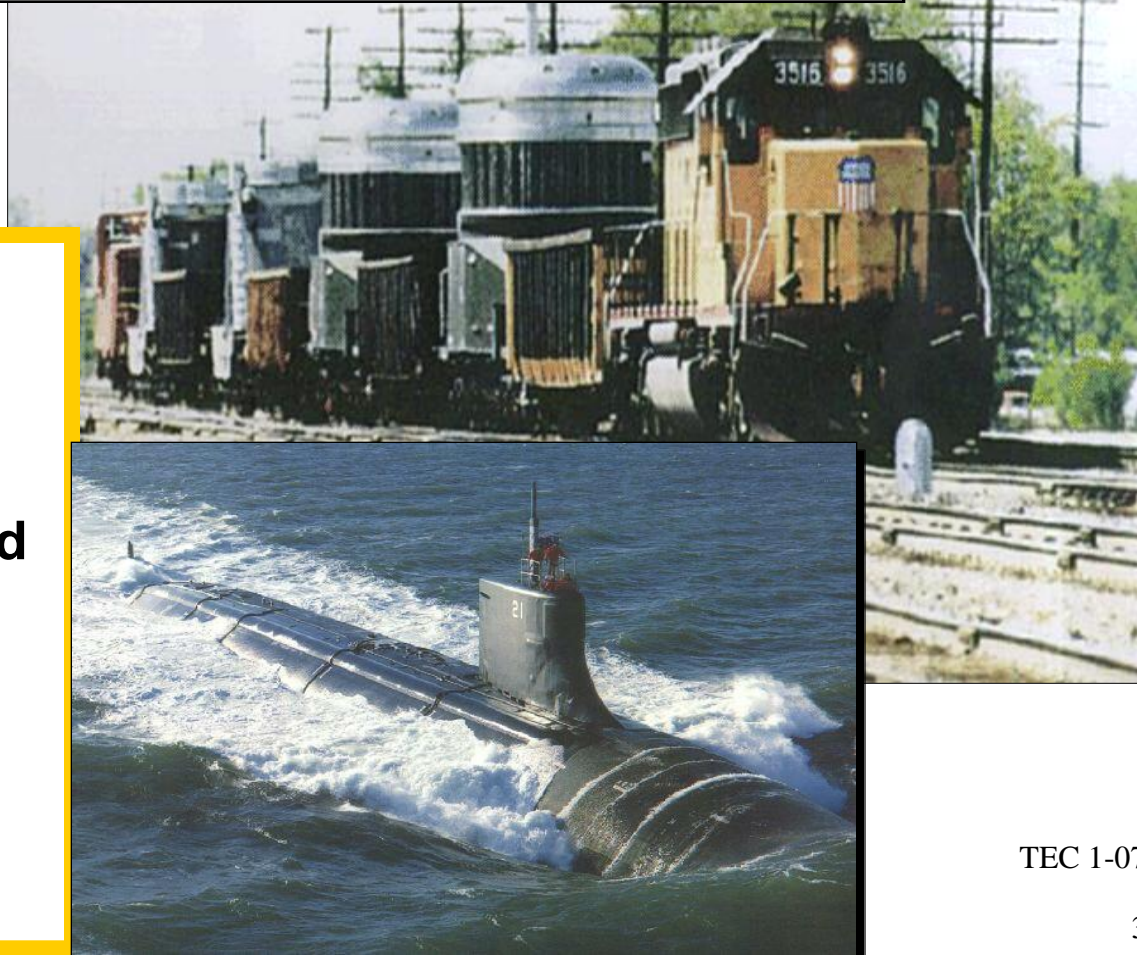
- **Upon refueling/defueling, all naval spent fuel transported by rail to Program's facility in Idaho for examination to:**

- **Ensure maximum performance of current fuel.**
- **Enable design of new fuel with longer lifetimes.**

NAVAL SPENT FUEL SHIPMENTS ARE SAFE

- * Nature of the fuel
 - Rugged
- * Shipping containers
 - Robust
- * Shipping practices
 - Escorts

- Solid metallic form
 - not flamm., not explos.
- Built for combat shock
- Contains fully all long-lived radioactivity (fission products)
- Safe to operate in close proximity to sailors on warships during combat



NAVAL SPENT FUEL SHIPPING CONTAINERS

RADIATION LEVELS

DOT limits (exclusive use)

- 200 mr/hr on contact
- 10 mr/hr at 6 feet

Typical M-140 levels

- 3.0 mr/hr on contact
- 0.1 mr/hr at 6 feet

Everyday life exposures *

- 300 mr/year

Soil, rocks, cosmic
rays, radon

- 54 mr/year

Medical/x-rays

* [NCRP Reports No. 94 & 100]

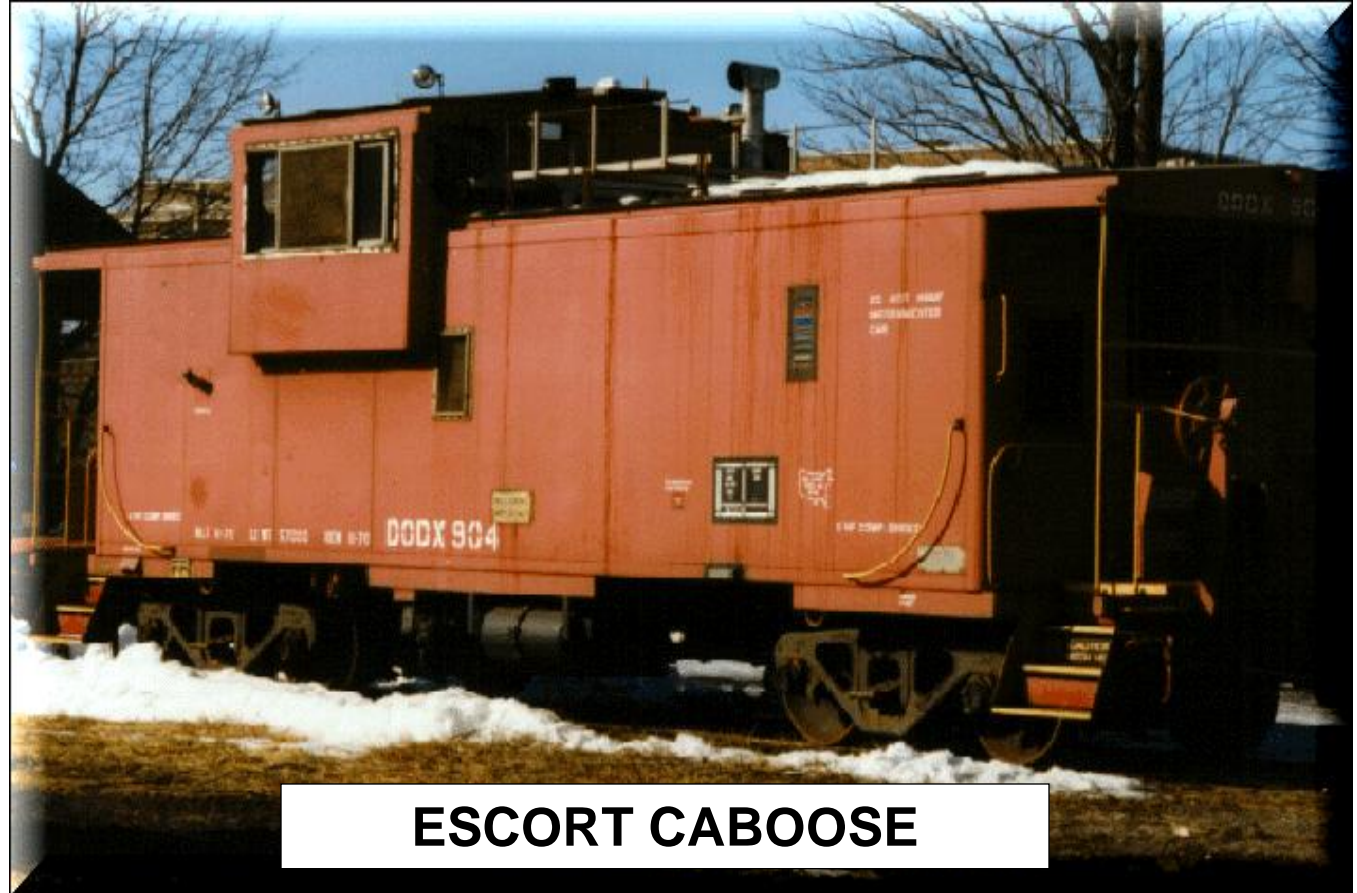


M-140 Transportation Cask

- 14 INCHES SOLID STAINLESS STEEL
- 350,000 POUNDS
- TYPE B NRC/DOE CERTIFIED

NAVAL SPENT FUEL SHIPPING PRACTICES

- Railcars inspected and maintained
- Location and status constantly monitored via satellite tracking
- Advance arrangements with railroad operations and police

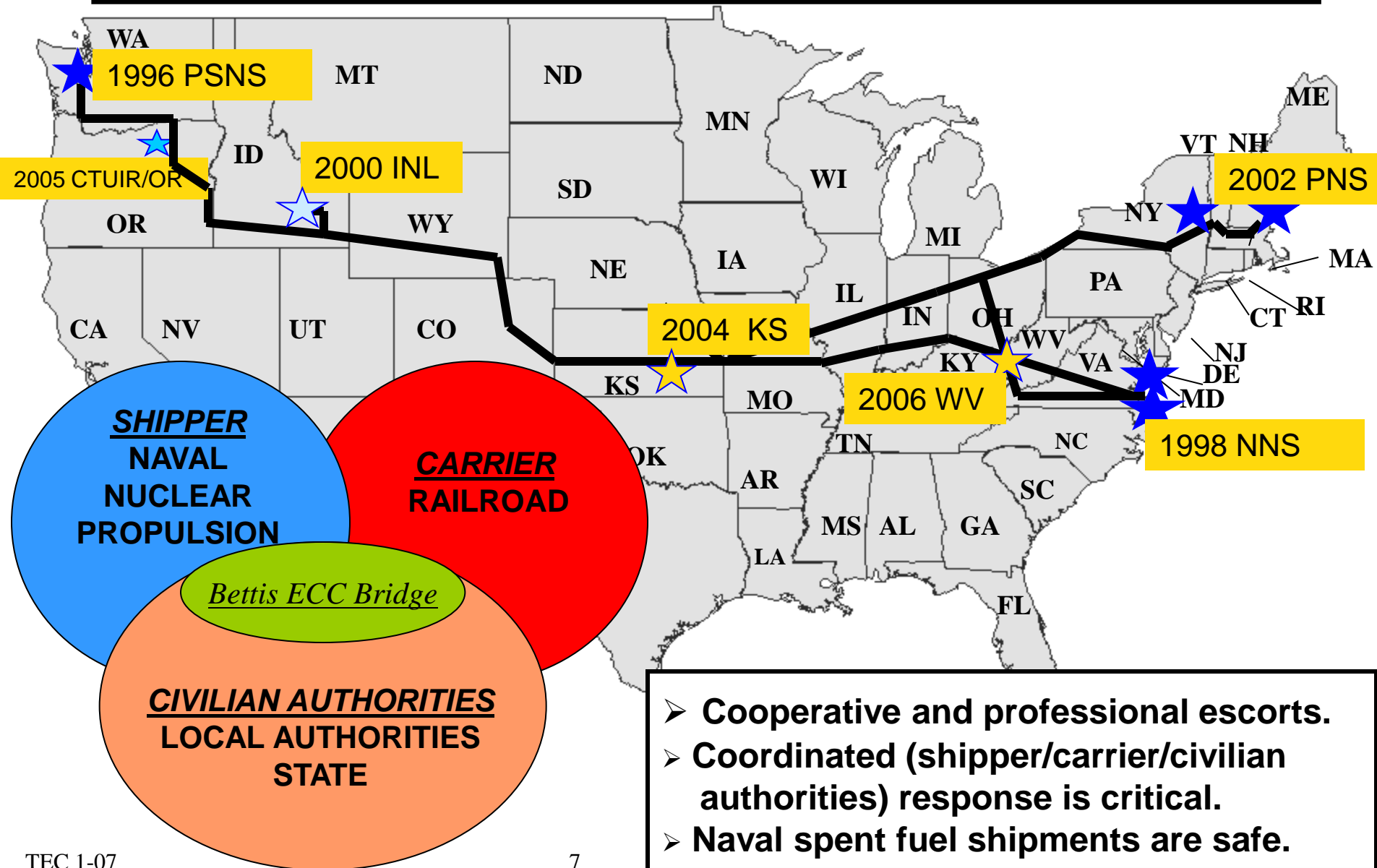


- Escorted by specially-trained Navy couriers
 - 24/7 surveillance
 - Immediate response

ACCIDENT/DERAILMENT RESPONSE

- Robust shipping containers provide a formidable barrier to release of radioactive material or significant radiation level increase, therefore ***EMERGENCY RESPONSE PRIORITIES ARE:***
 - * Emergency first-aid
 - * Summon assistance
 - * Prevent further injury/damage
 - * Verify radiological condition
- Navy couriers assist Incident Commander in:
 - Crowd control
 - Communications and public information
 - Initial response actions, e.g., safety boundaries.
- If the Navy couriers are severely injured, cordon the area, follow above priorities, and call Bettis at (412) 476-5000 (shipping papers and railcar signs) and report a **“transportation railroad emergency”**

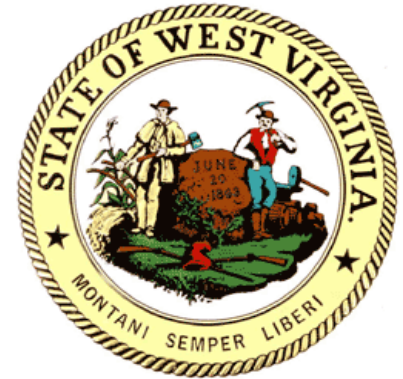
NAVAL SPENT FUEL SHIPMENT REGIONAL ACCIDENT EXERCISES



NAVAL SPENT FUEL SHIPMENT EXERCISE OBJECTIVES

- **Familiarize stakeholders with the Naval spent fuel shipping container characteristics and shipping practices**
- **Gain understanding of how the NNPP escorts who accompany the spent fuel shipments will interact with civilian emergency services representatives**
- **Allow civilian emergency services agencies the opportunity to evaluate their response to a simulated accident**
- **Gain understanding of how the communications links that would be activated in an accident involving a Naval spent fuel shipment would work**

NAVAL NUCLEAR PROPULSION PROGRAM STATE OF WEST VIRGINIA TRANSPORTATION ACCIDENT EXERCISE



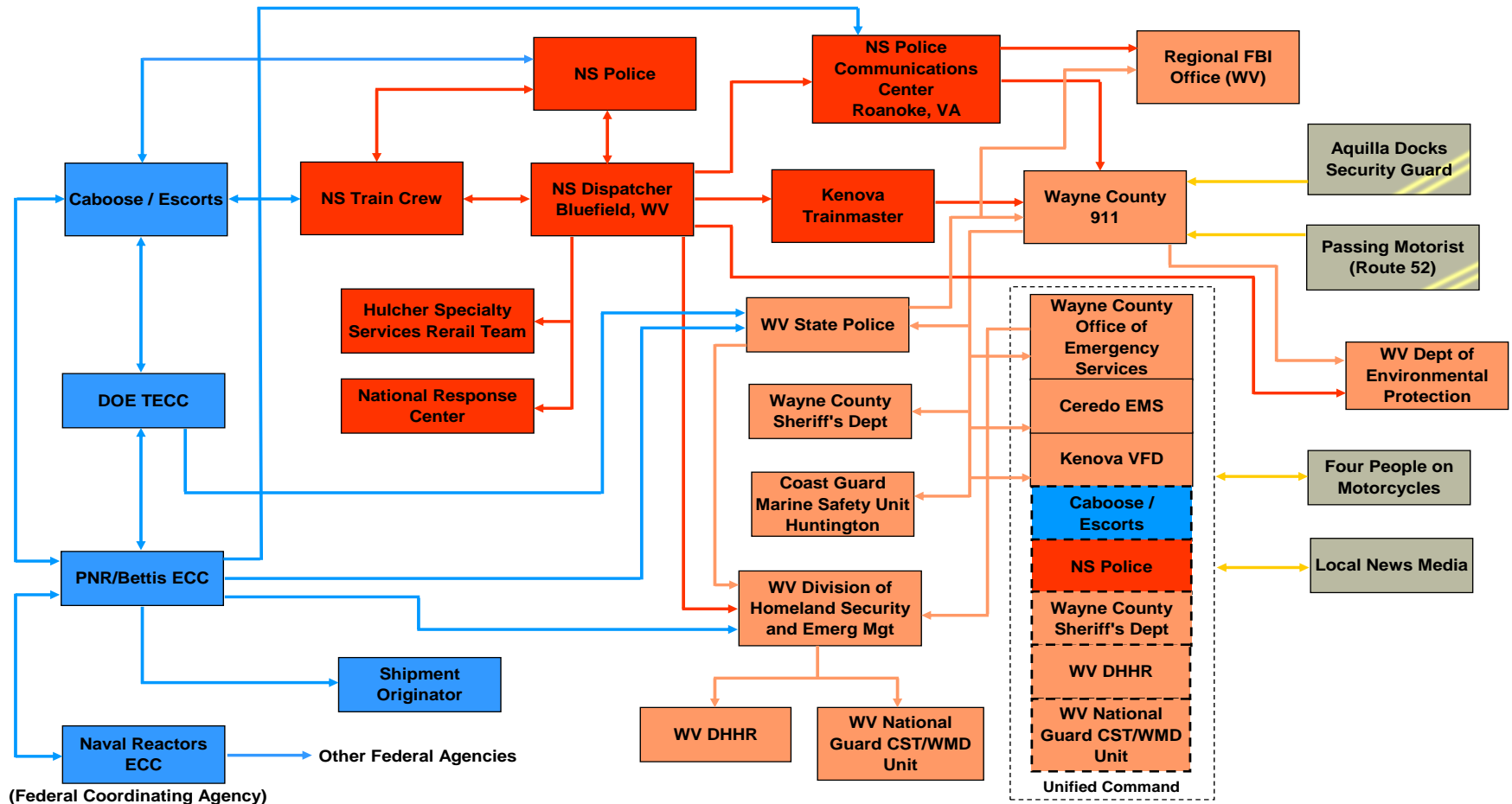
KENOVA, WEST VIRGINIA ACCIDENT EXERCISE TIMELINE

- ***Conceptual/Organizational Meeting – April 6***
 - *Emergency Response Triad commitment to proceed*
- ***Detailed Planning Meeting – May 11***
 - *Scenario / Participating organizations*
- ***Table Top Meeting – July 12***
 - *Refine scenario / Role play*
- ***Comm link verification – August 2***
 - *Got all the right numbers?*
- ***Walk Through/Dry Run Meeting – September 21***
 - *Participants only dress rehearsal*
- ***Exercise day – October 12***
 - *Observers from throughout region*

NAVAL SPENT FUEL SHIPMENT ACCIDENT / EMERGENCY PUBLIC AFFIARS

- Provide accurate information and proper perspective
- Mitigate rumors, minimize chance of panic
- Bettis Lab ECC manning includes Public Information Officers (PIOs)
 - Coordinate formal statements w/ State, railroad and NNPP HQ
 - Word-for-word agreement not required
 - Consistent message(s)
- Quick early statement – bare bones perspective
- Follow-on statement(s) provide more details
- Coordinate with on-scene PIOs

COMMUNICATION LINKS



NS = Norfolk Southern

DOE TECC = DOE Transportation Emergency Control Center in Albuquerque, New Mexico

PNR = Pittsburgh Naval Reactors Office at the Bettis Laboratory in Pittsburgh, Pennsylvania

Bettis ECC = Bettis Emergency Control Center

WV DHHR = West Virginia Department of Health and Human Resources

WV National Guard CST/WMD Unit = West Virginia National Guard 35th Civil Support Team / Weapons of Mass Destruction Unit

NEXT NAVAL SPENT FUEL SHIPMENT REGIONAL ACCIDENT EXERCISE

